

**Amendments to the Claims**

1. (CURRENTLY AMENDED) A circuit arrangement for obtaining an output signal  $(V_a)$  from a signal  $(V_s)$  containing at least one alternating component, said circuit arrangement comprising a signal source  $(1)$  that supplies this signal  $(V_s)$ , a first peak value detection device  $(2)$  for determining a maximum value  $(V_{max})$  of the signal  $(V_s)$ , a second peak value detection device  $(3)$  for determining a minimum value  $(V_{min})$  of the signal  $(V_s)$ , a first signal linking device  $(4, 5, 6, 71)$  for obtaining a first resulting signal  $(V_1)$  by additive linking of the signal  $(V_s)$ , the maximum value  $(V_{max})$  and the minimum value  $(V_{min})$  in accordance with the rule

$$V_1 = K_1 * \{V_s - (V_{max} + V_{min})/2\},$$

in which  $K_1$  is a freely selectable first constant factor,

a second signal linking device  $(7, 72)$  for obtaining a second resulting signal  $(V_2)$  by additive linking of the maximum value  $(V_{max})$  and minimum value  $(V_{min})$  in accordance with the rule

$$V_2 = (V_{max} - V_{min}) * K_2,$$

in which  $K_2$  is a freely selectable second constant factor,

a first squaring device  $(8)$  for squaring the first resulting signal  $(V_1)$ , a second squaring device  $(9)$  for squaring the second resulting signal  $(V_2)$  and a third signal linking device  $(10, 11, 101)$  for obtaining the output signal  $(V_a)$  by additive linking of the squared first resulting signal  $((V_1)^2)$  and the squared second resulting signal  $((V_2)^2)$  in accordance with the rule

$$V_a = K_3 * \{(1/8) * (K_1/K_2)^2 * (V_2)^2 - (V_1)^2\},$$

in which  $K_3$  is a freely selectable third constant factor.

2. (CURRENTLY AMENDED) A circuit arrangement as claimed in claim 1, characterized in that the signal source  $(1)$  is formed by a sensor device.

3. (CURRENTLY AMENDED) A circuit arrangement as claimed in claim 2, characterized in that the sensor device  $(1)$  is designed as a magnetoresistive sensor device.

4. (CURRENTLY AMENDED) A rotational speed measurement device,  
characterized by a circuit arrangement as claimed in ~~claim 1, 2 or 3~~ claim 1.

5. (CURRENTLY AMENDED) A method of obtaining an output signal ( $V_a$ )  
from a signal ( $V_s$ ) containing at least one alternating component, said method  
comprising the following method steps:

- determining a maximum value ( $V_{max}$ ) of the signal ( $V_s$ ),
- determining a minimum value ( $V_{min}$ ) of the signal ( $V_s$ ),
- obtaining a first resulting signal ( $V_1$ ) by additive linking of the signal ( $V_s$ ), the maximum value ( $V_{max}$ ) and the minimum value ( $V_{min}$ ) in accordance with the rule

$$V_1 = K_1 * \{V_s - (V_{max} + V_{min})/2\},$$

in which  $K_1$  is a freely selectable first constant factor,

- obtaining a second resulting signal ( $V_2$ ) by additive linking of the maximum value ( $V_{max}$ ) and minimum value ( $V_{min}$ ) in accordance with the rule

$$V_2 = (V_{max} - V_{min}) * K_2,$$

in which  $K_2$  is a freely selectable second constant factor,

- squaring the first resulting signal ( $V_1$ ),
- squaring the second resulting signal ( $V_2$ ) and
- obtaining the output signal ( $V_a$ ) by additive linking of the squared first resulting signal ( $(V_1)^2$ ) and the squared second resulting signal ( $(V_2)^2$ ) in accordance with the rule

$$V_a = K_3 * \{(1/8) * (K_1/K_2)^2 * (V_2)^2 - (V_1)^2\},$$

in which  $K_3$  is a freely selectable third constant factor.